

Section II: Advanced Website Development

Process Overview:

The development of flyout submenus to be displayed upon mouseover of a main menu item in the left navigation bar requires the creation of a table in the navigation bar with enough rows to accommodate all main menu items. In addition, the menu items in that table must be graphic images rather than simple text entries. A separate graphic will have to be created for each main menu item, and, when inserted into the web page, must be assigned a unique descriptive name that may be associated within your web page HTML with the activities that are to take place in connection with that item. A second rollover set of these images must be created with a different background color and used to mark the occurrence of a mouseover action on that menu item.

The setup requires 3 basic steps:

1. Create 2 sets of unique graphics for each main menu item (ItemName and ItemNameover).
2. Create your section copy of the hierArraysXXX.js javascript array file to specify the content of the submenus to be built on mouseover.
3. Modify your web page HTML source code to include the hierArraysXXX.js and hierMenus.js (not customized), to associate the unique graphics with each appropriate navigation table cell, and insert coding to initialize the buttons and to specify actions to take place upon mouseover of the main menu graphics items.

Each of the basic areas will be explained in detail in the following sections of this document.

Components Required:

Components that must be created:

- ♦ Separate graphics for each main menu item on your home page (one set for inactive display, another set in a different color to be substituted for the original image when the mouse is placed or clicked over it).

Components requiring customizing, manipulation or reference:

- ♦ hierArraysXXX.js Editing required.
(XXX should correspond to your section web page subdirectory.)
- ♦ hierMenu.js Reference in the HTML source code. No editing required.
(You can simply reference the master copy in the root directory of InfoLouisiana in your web page HTML without creating a separate copy in your section subdirectory.)
- ♦ HTML source code for each web page (accessible under Dreamweaver).

Creating Graphics for Navigation (without Photoshop):

Process:

Step 1: Create images in MSPaint

- ♦ Open “Paint” in your Start menu under Programs – Accessories.
- ♦ Click on “Image” in the top menu bar.
- ♦ Click on “Attributes...” in the Image drop-down menu.
- ♦ Click on “Pels” under Units, enter 110 for width and 20 for height, then click on “Colors” under Colors; click on “OK”.

- ◆ Click on “Edit” in the top menu bar.
- ◆ Click on “Select All” in the Edit drop-down menu.
- ◆ Click on a color square in the color array at the bottom of your screen. (Consider using one of the darker colors from your web page that coordinates nicely with the background color of your navigation bar. Be sure that it is noticeably different from the background color.)
- ◆ Click on the paint bucket color fill icon in the vertical tool bar.
- ◆ Click in your image to fill it with the chosen color.
- ◆ Click on the Text icon.
- ◆ Outline the entire graphic box with your mouse.
- ◆ Click inside the text box.
- ◆ Click on “View” in the top menu bar, then “Text Toolbar”.
- ◆ Select Trebuchet MS (Western), size 11, bold, as your font options.
- ◆ Click on the white square in the color array at the bottom of your screen (or whatever color other than black in which you want the text to display on your web page).
- ◆ Click inside the text box and begin typing your text.
- ◆ When finished, click on File – Save.
- ◆ Save your graphic as a 24-bit bitmap with a descriptive name that identifies the menu item (i.e. “services.bmp”) in your images subdirectory for your web pages.
- ◆ Click on File – Save As to save another copy of your image for the rollover version.
- ◆ Save this graphic as a 24-bit bitmap with the same descriptive name that identifies the menu item appended with “_over” (i.e. “services_over.bmp”), in your images subdirectory for your web pages.

Step 2: Convert images in MSPhoto Editor

Converting initial display images to transparent gif images:

- ◆ Open Microsoft Photo Editor in your Start menu under Programs – Microsoft Office Tools.
- ◆ Click on the file open icon and navigate to and select the first bitmap file you created in Paint (i.e. services.bmp, NOT services_over.bmp).
- ◆ Click on the “Set Transparent Color” icon (looks like a pencil with eraser) in your top toolbar.
- ◆ Place the resulting cursor tool inside your graphic on the dark color fill area (away from your text) and click to set that color as transparent on this image. This will allow the background color on your web page to show through.
- ◆ Click “OK” on the “Change Color to Transparent” window that is displayed. Your graphic will be displayed as a white and gray checker box.
- ◆ Click on File – Save As from your top menu bar.
- ◆ Repeat above steps for all initial images named in Paint as ItemName.bmp (i.e. services.bmp).

Converting rollover images to indicate mouseover action to gif images:

- ◆ Click on the file open icon and navigate to and select the second bitmap file you created in Paint as a rollover image to indicate mouseover action (ItemName_over.bmp, NOT ItemName.bmp – i.e. services_over.bmp, NOT services.bmp).
- ◆ Click on File – Save As from your top menu bar.
- ◆ Select “Graphics Interchange Format (*.gif)” from the Save As Type drop down list and click on “Save” to store a gif format file of your graphic in the same images subdirectory.
- ◆ Repeat above steps for all rollover images named in Paint as ItemName_over.bmp (i.e. services_over.bmp).

The menu item graphic is now ready to be inserted into your web page under Dreamweaver.

Storage Location: /images subdirectory under the root of your section’s website subdirectory.

Customizing hierArraysXXX.js

HierArraysXXX.js is simply a data file containing 2 levels of arrays to be used by the javascripts to build the flyout submenus. However, the format and punctuation of the arrays are critical, as the process will simply not work if there are any errors, and no error messages will be displayed to help you to diagnose the problem.

Note: You may copy and paste the following lines into a file named hierArraysXXX.js where XXX is your section's name. This file should be saved as a separate file in the root directory of your website, along with your html files. To create your own version, be sure to delete the note number for the instructional comments found in the next section (which are typed in bold italics within parentheses on each line as appropriate). Replace each generic entry which displays on the flyout menu (i.e. "First Item of Menu 1") with the text that you wish to appear on that flyout menu line. Replace each generic link (i.e. "firstoffirst.htm") with your desired target address. For additional information, be sure to carefully read the format notes and instructions on the next page.

Format:

***** Copy and modify from "arMenu1..." through last ");" *****

```

arMenu1 = new Array(                                     (1)
    "",
    "110","94",                                          (2)
    "",
    "",
    "",
    "",
    "",
    "First Item of Menu 1","firstoffirst.htm",0,          (3)
    "Second Item of Menu 1","secondoffirst.htm",0,
    "Third Item of Menu 1","thirdoffirst.htm",0,
    "Fourth Item of Menu 1","fourthoffirst.htm",0,
    "Fifth Item of Menu 1","fifthoffirst.htm",0,
    "Sixth Item of Menu 1","sixthoffirst.htm",0,
    "Seventh Item of Menu 1","seventhoffirst.htm",0,
    "Eighth Item of Menu 1","eighthoffirst.htm",0,
    "Ninth Item of Menu 1","ninthoffirst.htm",0          (4)
);                                                         (5)
arMenu2 = new Array(                                     (6)
    "",
    "110","114",
    "",
    "",
    "",
    "",
    "First Item of Menu 2","firstofsecond.htm",0,
    "Second Item of Menu 2","secondofsecond.htm",0,
    "Third Item of Menu 2","thirdofsecond.htm",0,
    "Fourth Item of Menu 2","fourthofsecond.htm",0,
    "Fifth Item of Menu 2","fifthofsecond.htm",0,
    "Sixth Item of Menu 2","sixthofsecond.htm",0,
    "Seventh Item of Menu 2","seventhofsecond.htm",0,
    "Eighth Item of Menu 2","eighthofsecond.htm",0,

```

```
"Ninth Item of Menu 2","ninthofsecond.htm",0,
"Tenth Item of Menu 2","tenthofsecond.htm",0
);
```

***** End of format sample *****

Format Notes:

1. Beginning of Menu 1 – for 1st item in navigation bar menu table. DO NOT CHANGE.
2. First digit:
This number controls horizontal placement (in pixels) of the submenu – next to your navigation bar. If your navigation bar table width remains at 110 pixels as in most of the templates, specify “110”. Otherwise, customize as necessary to place the left edge of the flyout submenu next to the right edge of the navigation bar.
Second digit:
This number controls vertical placement (in pixels) of the submenu. It should ideally line up with the top of your menu item graphic. Adjust as necessary to find the appropriate number. This placement will be used by the scripts IF the contents of the flyout submenu will fit from that point downward to just above the bottom of the web page. If it does not fit from that point downward, the process will reposition the submenu on the page so that all items on the submenu can be seen within the page area.
3. Submenu item with target link. Modify to replace “First Item of Menu 1” etc. with your submenu line item text, and “firstoffirst.htm” etc. with your target link html file name.
4. Last item on this submenu. It is designated by omitting the “,” after the “0” at the end of the line.
5. End of Menu 1 array.
6. Beginning of Menu 2 – for 2nd item in navigation bar menu table. DO NOT CHANGE.

Instructions :

- ♦ Create text file in your favorite text editor per the above parameters.
- ♦ Save text file as hierArraysXXX.js (file type Text Document) where XXX corresponds to your section web page subdirectory (i.e. OSP or OSIS).
- ♦ There will be no indication in this file of what main menu item is associated with a particular submenu array – control is through the position in the highest level of the array (i.e. arMenu1 corresponds to the first menu graphic in your navigation table).
- ♦ Replace “First Item of Menu 1” etc. with the menu text that you want to display on that line of the submenu.
- ♦ Replace each “firstoffirst.htm” etc. with the name of the HTML file for the target web page.
- ♦ Enter as many lines as necessary to build the submenu that is needed. Be sure to include a comma at the end of each EXCEPT the LAST.
- ♦ Save your file in the top (root) level of your section’s website subdirectory.

Storage Location: Root level of YOUR SECTION’S web subdirectory.

Referencing hierMenus.js in Dreamweaver Templates:

HierMenus.js is the javascript that actually builds the menus displayed upon mouseover of your main menu navigation graphics. It uses the data specified in hierArraysXXX.js. This coding need not be copied to your subdirectories or typed into your template HTML. However, you must insert lines to reference the process in your template HTML so

that the coding will be executed as needed. Therefore, rather than copying the entire contents of hierMenus.js in your HTML, copy and insert the following lines which set up the variables for the process and also pulls in the hierMenus.js javascript. This may be done either through a simple HTML editor, your favorite text processor (be sure to save as plain text), or by opening the template in Dreamweaver and then opening the HTML Source view under “Window”.

New lines should be added below the following:

```
<html>
<head>
<title>Your web page title</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
```

Lines to be added:

Copy and paste the following, (beginning with the <SCRIPT LANGUAGE=”JavaScript”> line, into your HTML file. You may add additional lines to correspond with the number of items on your main menu. Customize the characteristics of your flyout submenu and main navigation graphics by changing the lines below as needed (italicized and bolded instructional comments are found on those lines). At a minimum, the line that references hierArraysXXX.js must be changed to replace XXX with your section initials/section subdirectory. That line is bolded in the format below for easy recognition.

***** copy from next line down to “*” line marking the end *****

```
<SCRIPT LANGUAGE="JavaScript">
```

```
<!-- * The following lines control the loading of navigation images into the computer's memory. Replace the bolded file names with your own image file names. //-->
```

```
<!--
```

```
if (document.images) {
```

```
    Menu1Up = new Image();    Menu1Up.src = "images/ItemName.gif";
    Menu1Over = new Image();  Menu1Over.src = "images/ItemName_over.gif";
    Menu2Up = new Image();    Menu2Up.src = "images/SecondItemName.gif";
    Menu2Over = new Image();  Menu2Over.src = "images/SecondItemName_over.gif";
    Menu3Up = new Image();    Menu3Up.src = "images/ThirdItemName.gif";
    Menu3Over = new Image();  Menu3Over.src = "images/ThirdItemName_over.gif";
```

```
<!--* Insert as many as you need. //-->
```

```
}
```

```
<!--* The following function controls swapping of images – DO NOT CHANGE. //-->
```

```
function changeImages() {
    if (document.images) {
        for (var i=0; i<changeImages.arguments.length; i+=2) {
            document[changeImages.arguments[i]].src =
            eval(changeImages.arguments[i+1] + ".src");
        }
    }
}
```

```
<!--* The following function controls resetting of buttons – navigation images – to original state. //-->
```

```

function resetButtons() {
    changeImages('Menu1','Menu1Up');
    changeImages('Menu2','Menu2Up');
    changeImages('Menu3','Menu3Up');

<!--* Insert as many as you need – to correspond to images specified above for loading into memory. //-->

}
//-->
</SCRIPT>

<!-- Begin Global Parameters for Hierarchical Menus //-->
<!-- http://www.webreference.com/dhtml/dynamat/hiermenus3/ //-->

<SCRIPT LANGUAGE="JavaScript">
<!--
    NS4 = (document.layers);
    IE4 = (document.all);
    ver4 = (NS4 || IE4);
    isMac = (navigator.appVersion.indexOf("Mac") != -1);
    isMenu = (NS4 || (IE4 && !isMac));
    function popUp(){return};
    function popDown(){return};
    function startIt(){return};
    if (!ver4) event = null;

    if (isMenu) {
menuVersion = 3;
menuWidth = 164;
borWid = 2;
borSty = "solid";
borCol = "#003366";
separator = 1;
separatorCol = "#FFFFFF";
fntFam = "Arial, Helvetica";
fntBold = true;
fntItal = false;
fntSiz = 8;
fntCol = "#003366";
overFnt = "#003366";
itemPad = 1;
backCol = "#FFFFFF";
overCol = "#99CCCC";
imgSrc = "tri.gif";
imgSiz = 10;

childOffset = 0;
childOverlap = 2;
perCentOver = null;

```

//<--CONTROLS THE WIDTH OF THE SUBMENU BOX

//<--CONTROLS THE THICKNESS OF THE BORDER AROUND BOX

//<--CONTROLS THE BORDER STYLE OF BOX

//<--CONTROLS THE BORDER COLOR OF BOX

//<--CONTROLS THE NUMBER OF SPACES (IN PIXELS) BETWEEN EACH BOX ITEM

//<--CONTROLS CELL BORDER COLOR FOR ITEMS IN BOX

//<--CONTROLS THE FONT FAMILY AND TYPE IN BOX

//<--CONTROLS THE BOLDNESS OF THE TEXT (TRUE=BOLD, FALSE=NOT BOLD)

//<--CONTROLS THE ITALICS OF THE TEXT(TRUE=IN ITALICS, FALSE=NOT IN ITALICS)

//<--CONTROLS THE FONT SIZE IN THE BOX

//<--CONTROLS THE FONT COLOR IN BOX

//<--CONTROLS THE TEXT COLOR WHEN ONMOUSEOVER EVENT OCCURS

//<--CONTROLS THE CELL PADDING FOR THE BOX

//<--CONTROLS THE BOX'S BACKGROUND COLOR

//<--CONTROLS THE ITEM'S COLOR WHEN ONMOUSEOVER EVENT OCCURS

```

clickStart = false;           //<--CONTROLS WHETHER TO WAIT FOR AN ONCLICK EVENT FOR MENU TO APPEAR OR NOT
clickKill = false;           //<--CONTROLS WHETHER TO WAIT FOR AN ONCLICK EVENT TO ERASE MENU BOX
secondsVisible = 0.5;        //<--CONTROLS (IN SECONDS) HOW LONG THE BOX STAYS UP AFTER ONMOUSEOUT EVENT

keepHilite = true;
NSfontOver = false;

isFrames = false;
navFrLoc = "left";
mainFrName = "main";
}
//-->
</SCRIPT>

<!-- End Global Parameters for Hierarchical Menus -->

</head>

<body bgcolor="#FFFFFF" link="#006699" vlink="#666666" alink="#6699CC">

<!-- Begin Includes for Hierarchical Menus -->

<SCRIPT LANGUAGE="JavaScript1.2">
<!--
if (isMenu) {
document.write("<SCRIPT LANGUAGE='JavaScript1.2' SRC='hierArraysXXX.js'></SCRIPT>");
document.write("<SCRIPT LANGUAGE='JavaScript1.2' SRC='http://www.state.la.us/hierMenus.js'></SCRIPT>");
}
//-->
</SCRIPT>

<!-- End Includes for Hierarchical Menus -->

***** end copy at end of above comment line *****

```

Modifying Template HTML (.dwt) to Display Flyout Submenus on Mouseover:

Instructions:

- ◆ To ensure that the flyout submenu appears in the same relative position at all resolution settings (i.e. placement does not change when PC resolution is at 640X480 instead of 800X600), do NOT extend the overall width of the main content area table (including for these purposes the navigation bar and the white content area) past 720 pixels. All templates should be set up with a master table width for the page of 720 pixels. Do not change this outer boundary width.
- ◆ Create a table (if not already set up in your template) in the vertical navigation bar on the left side of your page within Dreamweaver as follows:
 - Click within the colored navigation bar area.

- Click on “Insert” in the top menu bar.
- Click on “Table” in the drop-down menu.
- On the Insert Table dialog,
 - Specify as many rows as you need to accommodate the number of navigation menu items you have.
 - Leave Columns at “1”.
 - Specify “0” for Cell Padding and Cell Spacing.
 - For use with other components in these instructions, specify “110” for the width and change the unit from “percent” to “pixels” by selecting that option from the drop-down menu.
 - Leave Border at “0”.
 - Click “OK”.
- If the placement of the table is not as you wish, many details may be manipulated to position it differently. For example, try clicking in the navigation bar above the location of the table. If you see “Paragraph” in the Format box, try changing it to “None” and the table should be moved to the top of the navigation bar. If that is too close, you can insert a break object (not a new paragraph, which is started by pressing the enter key) to position the start of the link area down one line.
- ♦ Insert the graphic images that you created for each of your main menu items (**ItemName.gif**, NOT ItemName_over.gif, i.e. “services.gif” NOT “services_over.gif”) into the appropriate row of your left navigation bar table and specify their properties as follows:
 - Click on the first navigation table row to place your cursor in that cell.
 - Click on “Insert” in the top menu bar, click on “Image” in the drop down menu, and navigate to and select your menu item image from your images subdirectory (i.e. images/services.gif).
 - In the Properties window for the graphic that has been inserted, specify the following:
 - Specify a graphic name in the first blank field in the upper left corner, next to the sample display of the image, as follows: MenuX where X is the occurrence number (1, 2, 3, etc.) on your menu table.
 - Specify a link for the graphic as a default in case the user simply clicks on the image instead of selecting from the flyout submenu.
 - Repeat the above steps as necessary until all graphics have been placed for complete navigation.
- ♦ For each main menu item:
 - Locate the code in the HTML that displays the graphic in the navigation table row. This may be done in any of the following ways:
 - In Dreamweaver:
 - Position your cursor over the graphic and click to select it.
 - Click on “Window” in the top menu bar.
 - Click on “HTML Source” to open a window displaying the HTML code. It will open with the display position at the point in the code associated with that graphic table row and the image source statement will be highlighted.
 - In a text editor like WordPad or Word:
 - Open your template HTML file (.dwt).
 - Find the following text: <a href="yourdefaultlink.htm" onMouseOver="resetButtons(); popUp('elMenuX',event);
window.status='MenuX'; changeImages('MenuX','MenuXOver'); return true;"
onMouseOut="popDown('elMenuX')"></td>
```

*Be sure to substitute your navigation item number for “X”.*

**Example – If your second menu item is “Services”:**

```
<td><a href="services.htm" onMouseOver="resetButtons(); popUp('elMenu2',event);
window.status='Menu2'; changeImages('Menu2','Menu2Over'); return true;"
onMouseOut="popDown('elMenu2')"></td>
```

\*THE END\*

